



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

4/035/009

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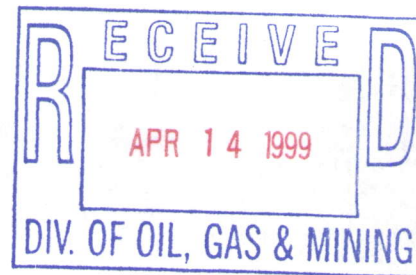
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Executive Secretary



April 14, 1999

Mr. Dennis M. Kerstiens
General Manager
Barneys Canyon Mine
8200 South 9600 West
P.O. Box 311
Bingham Canyon, Utah 84006-0311

Subject: Approval for Extending Heap Leach Pad BC-3.

Dear Mr. Kerstiens:

We have reviewed the plans for the referenced project prepared by your staff and your consultants CEntry Contractors & Engineers. We received this information on April 5, 1999.

This project is for extending heap leach pad No. BC-3 Approximately 250 feet up-gradient towards the west. We approved the design criteria as outlined in the issued construction permit dated, March 24, 1989, for the three previous heap leach pads, viz., BC-1, 2 and 3.

1. *Leak detection system will be constructed of 3-inch diameter Schedule 80 polyvinylchloride (PVC) pipes and spaced at 200 foot intervals.*
2. *Each leak detection line will be placed against a clay berm. The berm under the leak detection pipe will be lined with synthetic liner. A gravel pack will be placed around the leak detection pipe and wrapped with filter fabric.*
3. *The perimeter around the pads will be double lined with 60 mil HDPE liner extending under the heaped ore. A separate leak detection/collection system will be installed between the liners.*
4. *A diversion ditch will be placed on the shoulder of the cut and one at the toe, both are designed to intercept and divert storm water generated from a 100-year 24-hour storm event.*

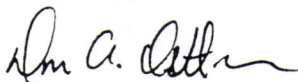
These modifications have been incorporated in the plans.

Mr. Dennis M. Kerstiens
April 14, 1999
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Based on our review, the proposed extension complies with Utah's Water Quality Rule, (R317, Utah Administrative Code) for the stated use, and are hereby approved in accordance with Part 1, Paragraph D.1 of your Groundwater Permit No. UGW350001.

If we can be of further assistance, please contact me or Lyle Stott of my staff.

Sincerely,



Don A. Ostler, P.E.
Director

DAO:lws

cc: Brian Bennion - Salt Lake City/County Health Department
Wayne Hedberg - Division of Oil, Gas and Mining

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